

Visualizing and Analyzing NIAID's Research Portfolios

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July 23, 2014

Why Build a Visual Analytic Tool?

Mine Data

NIAID has rich, complex data that describes the Institute's funded research portfolio. Visualization of this data frequently uncovers hidden information, and makes it accessible to more users.

Interact with Data

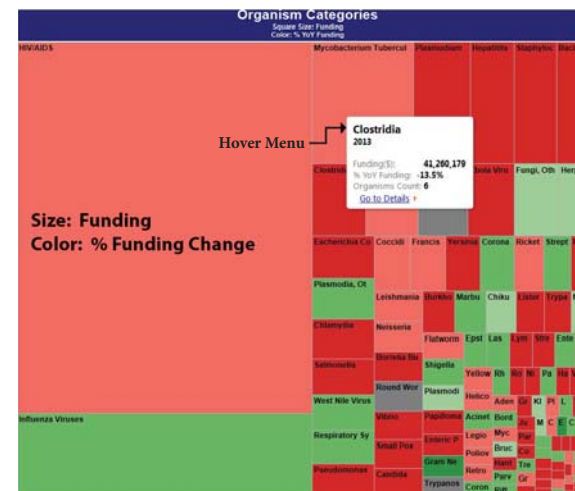
Interaction allows the end user to

- gain insight easily and quickly
- analyze data as questions evolve
- slice and dice information

Personalize Data

Allows analysts to present the right amount of information, from a snapshot view to project level details.

Treemap View of NIAID's Infectious Disease Research Portfolio



- A snapshot of over 250 NIAID funded organisms.
- Funding for each organism.
- Funding change for each organism.
- Relative size of funding for organisms.

Bar Graph View of Selected NIAID Funded Disease Categories



- An overview of ~40 selected categories.
- Connects to a live database and updates changes daily.
- Shows funding and % funding change for each category.

Details for a Selected Disease Category

3. DETAILS							
Category	FUNDING_M	ACTIVITY_C	Compare Project Num.	PROJECT_TITLE	2012	2013	
West Nile Virus	Contract	N01	27220080004C-15-5-3	VACCINE AND TREATMENT EVALUATION UNITS		50,000	
			27220080004C-15-5-3	Adjuvant Development Program	1,254,141		
			27220100023C-0-0-1	Identifying Epitopes Recognized by Influenza and Parvovirus		1,573,960	
			27220100023C-0-0-1	Novel Innate Immune Adjuvant for Avian Influenza and West Nile		6,778,054	
			27220100023C-0-0-1	Development of an Adjuvant with Vaccines for Anthrax, and West Nile		2,244,621	
			272200027-8-0-2	World Reference Center for Arboviruses		46,485	

Project Level Details

Benefits of Using a Data Visualization Software

Connects to various data sources

- Provides real-time connection to databases. Connecting live to the database allows the user to automatically visualize updated data.
- Can upload Excel spreadsheets or other common file formats to build visuals.

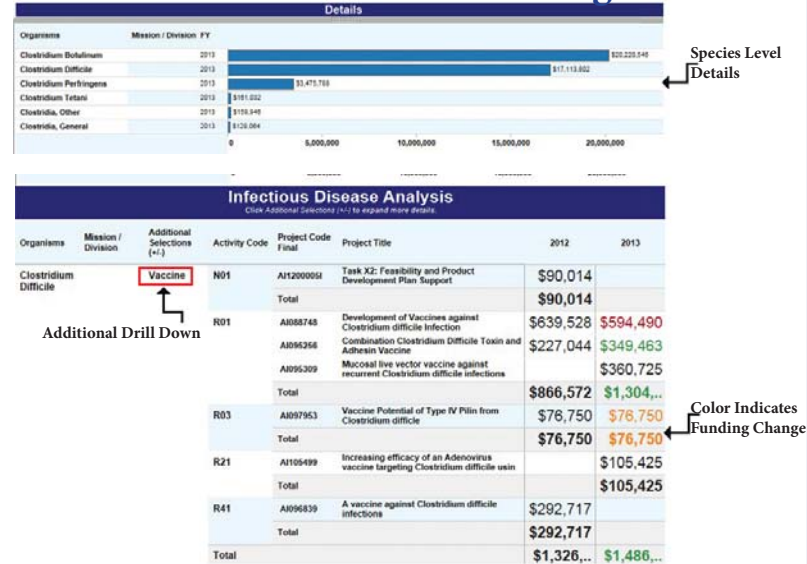
Provides numerous chart options

Multiple chart/graphic options for appropriate representation of different data types.

Allows interaction with data

- Drill down capability allows users to select and filter on data to answer specific questions.
- Hover view provides additional information and underlying data on a specific category.

Details for a Selected Disease Organism



A visual analytic tool resulted in

- Better **understanding** of, **accessibility** to and **interaction** with the data. The tool allows the user to find information that might have remained otherwise unknown and to quickly respond to specific questions about a given portfolio.

- A more **efficient method** of analyzing portfolios.

